Department of Energy

Three Year Rolling Timeline; Implementing the Goals and Objectives of Asset Management Plan

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Date: 12 June 2006

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SECTION 1 – Three Year Rolling Timeline Overview

1.1 INTRODUCTION

The Department of Energy's Three Year Rolling Timeline (TYRT) is designed as a 'living-document' providing the strategies for implementing the Department's Real Property Asset Management Plan developed originally by Executive Order 13327. It establishes specific real property management improvement activities and outcomes as well as goals and targets aligned with the four key performance metrics defined by the Federal Real Property Council. Future TYRTs will incorporate those real property asset management specific goals and targets developed under the PMA initiatives for Environmental Stewardship and Energy Management. These initiatives will be included in sections four and five respectively of the TYRT.

1.2 SUMMARY OF ACCOMPLISHMENTS

The Department of Energy has made significant progress in improvement of real property asset management. In 2003, the Department published its Real Property Management Order (RPAM) which directed a holistic, life-cycle approach to real property management. To date, over 200 DOE facility professionals have received formal training in RPAM, effectively internalizing its cradle-to-grave approach to real property management.

A key element of RPAM is the requirement for forward-looking, Ten Year Site Plans (TYSPs); the site and mission-specific blue-print for life-cycle management of site real property assets. All major DOE sites have an approved TYSP and because TYSPs are "living documents", they are formally updated each year within the overall budget process. The TYSP process, which requires written approval of the site plan at the Assistant Secretariat level, has generated unprecedented facility visibility.

The most significant accomplishment in 2005 was the publication of the Department's Asset Management Plan signed-out by the Deputy Secretary. This plan has been promulgated throughout the Department as the overall framework for the strategic management of the Department's Real Property Assets.

The Facilities Information Management System (FIMS), the Department's repository of real property information continues to improve. It now contains over 20,000 real property records each containing up to 200 discrete data fields. By the end of Fiscal Year 2005, all FIMS records were populated with the 23 Federal Real Property Council data elements and metrics. FIMS usage has reached a new high with an active user's group exceeding 350 real property professionals. Realizing the importance of maintaining the accuracy of the FIMS data, in 2005 the Department developed a standard, statistical validation process that can be applied at all sites. The data validation process has been successfully piloted at several sites. A formal training class is being rolled-out so individual Sites and Programs can perform data validation studies. A detailed review of the internal controls of FIMS was conducted and internal control improvements are underway.

The Three-Year Rolling Timeline builds on our success in real property management by identifying activities that encourage timely and accurate reporting of real property data, targeting the continued disposition of unneeded assets, looking for efficiencies in operating costs and focusing on long-term improvement to real property utilization and condition.

1.3 FACILITIES PLANNING PROCESS

The management of real property assets must take a corporate, holistic, and performance-based approach to real property life-cycle asset management that links real property asset planning, programming, budgeting, and evaluation to program mission projections and performance outcomes. Acquisitions, sustainment, recapitalization, and disposal should be balanced to ensure real property assets are available, utilized, and in a suitable condition to accomplish DOE's mission.

Figure (1) is the DOE facilities planning process. It begins with the DOE Strategic Plan and Asset Management Plan that establish the Secretary's long range vision for the Department. The near-term direction is contained in the Secretary's Annual Planning Guidance which covers a five-year time horizon and communicates specific requirements and expectations to the Programs. The Programs issue Program Guidance to sites containing specific site requirements and expectations based upon guidance from the Secretary and other sources. The site manager prepares the site-wide Ten Year Site Plan (TYSP) based on program guidance and locally identified requirements, including tenant requirements. The TYSPs are reviewed and approved by the responsible Lead Program Secretarial Office (LPSO). The LPSOs ensure that the TYSPs are consistent with the Integrated Facilities Infrastructure (IFI) Crosscut budget to ensure funding is available to execute the TYSP. The TYSP approval process serves as the communication vehicle to ensure that expectations and accountabilities are clearly delineated and understood. Ten Year Site Plans establish expectations against which outcomes can be measured and form the foundation for DOE's Real Property Asset Management Plan. TYSPs are kept current to reflect changing needs, priorities, and fiscal decisions. This is a dynamic, continuous process that provides documented opportunities for direction, planning, execution, feedback, and adjustment.

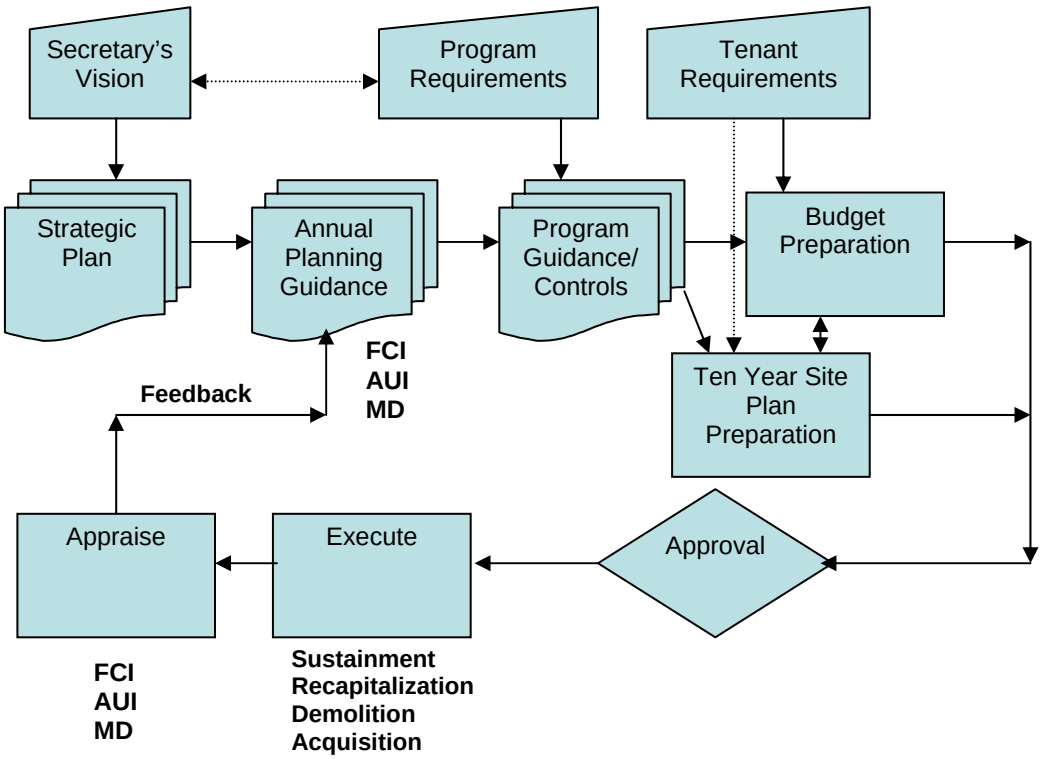


Figure (1): Department of Energy Facilities Planning Process

The IFI Crosscut budget exhibit, together with the Department facilities and infrastructure data, and TYSP are used in making reasoned and informed decisions on the management of its real property assets. They establish a baseline against which DOE can assess past facilities performance and make adjustments to improve future facilities performance.

1.4 PERFORMANCE MEASUREMENT FRAMEWORK

DOE has established a performance measurement framework in alignment with the Federal Real Property Council Guidelines that includes management information systems to collect and report on facilities data and numerical indicators to reflect portfolio-wide facilities status. Included in these measures are asset condition, asset utilization, and maintenance expenditures against quarterly budget targets. Lower tier measures are used by Programs to support assessment of mission specific requirements. Analysis of this data is used to assess outcomes against objectives and based on the results of this analysis, course corrections are made when warranted through input into the Secretary's planning guidance. The Deputy Secretary is provided quarterly reports of performance against targets. This process forms a continuous cycle of measurement, evaluation, and feedback.

1.5 DESIRED MANAGEMENT OUTCOMES AND ASSOCIATED MEASUREMENTS

Figure 2 identifies specific real property performance targets and desired outcomes. These targets are consistent with the Department of Energy Asset Management Plan as well as the Federal Real Property Council Guidance.

DOE Three Year Rolling Timeline Measures											
		Baseline					Target				FRPC Guideline
Measures		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	DOE Goal	
1.2.1 Asset Utilization Index[1]	Office	75.68%	75.54%	76.64%	94.93%	92.39%	90.00%	90.00%	90.00%	90.00%	70 - 95%
	Warehouse	71.33%	83.58%	82.09%	88.90%	88.06%	85.00%	85.00%	85.00%	85.00%	50 - 85%
	Laboratory	85.49%	83.61%	81.55%	89.08%	89.62%	85.00%	85.00%	85.00%	85.00%	60 - 85%
	Hospital	45.02%	36.35%	29.29%	86.06%	87.19%	90.00%	90.00%	90.00%	90.00%	70 - 95%
	Housing	62.46%	36.35%	72.30%	99.59%	99.67%	99.00%	99.00%	99.00%	99.00%	85 - 100%
1.2.2 Elimination of Excess Percent Excess Remaining[2]		-	21.72%	20.98%	19.21%	16.67%	15.73%	15.08%	14.50%	5.00%	-
2.2.1 Improve Asset Condition	Mission Critical	-	-	-	-	0.942	0.943	0.944	0.945	>0.950	-
	Mission Dependent	-	-	-	-	0.935	0.934	0.933	0.932	>0.900	-
	Not-Mission Dependent	-	-	-	-	0.861	0.860	0.859	0.858	>0.850	-
3.2.2 Operating Costs (Energy Reduction)			-47.5%[3]	-50.1%[3]	-50.5%[3]	-52%[3]	-2%[4]	-4%[4]	-6%[4]	-20% by 2015	-

[1] AUI The index is the ratio of the area of all utilization-Justified space in operating facilities (numerator) to all operational and excess facilities without a disposition baseline and funding (denominator). AUI does not include closure sites. Based o

[2] Based on 2005 Baseline

[3] Reduction from 1985 baseline (35% reduction by 2010)

[4] Reduction from 2003 baseline (20% reduction by 2015) in accordance with the 2005 Energy Policy Act.

Figure 2 – Real Property Performance Targets and Associated Measures

SECTION 2: Performance Measures

Actions taken in the Three-Year Timeline lead to meeting the goals and objectives of the Department's Asset Management Plan (AMP) to improve the Department's real property portfolio by aggressively pursuing activities that will lead to improved facility condition, disposal of excess and under utilized property, improve asset utilization and maintain the inventory at the right cost to ensure the department's multi-faceted mission is accomplished effectively and efficiently.

2.1 ***Asset Utilization***

2.1.1 Improve Asset Utilization Index (AUI) – AUI is the Department's corporate measure of facilities and land holdings against requirements. AUI is the Department's equivalent to the FRPC "Utilization" measure. The index reflects the outcome from real property acquisition and disposal policy, planning, and resource decisions. The index is the ratio of the area of operating facilities or land holdings justified through annual utilization surveys (numerator) to the area of all operational and excess facilities or land holdings without a funded disposition plan (denominator). The AUI is derived from data in FIMS obtained from annual utilization surveys. The AUI improves as excess facilities are eliminated and consolidation increases the space utilization rate of the remaining facilities.

Asset Utilization Index (AUI) Targets[1]											
		Baseline					Target				FRPC Guideline[3]
Measures		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	DOE Goal	
1.2.1 Asset Utilization Index[2]	Office	75.68%	75.54%	76.64%	94.93%	92.39%	90.00%	90.00%	90.00%	90.00%	70 - 95%
	Warehouse	71.33%	83.58%	82.09%	88.90%	88.06%	85.00%	85.00%	85.00%	85.00%	50 - 85%
	Laboratory	85.49%	83.61%	81.55%	89.08%	89.62%	85.00%	85.00%	85.00%	85.00%	60 - 85%
	Hospital	45.02%	36.35%	29.29%	86.06%	87.19%	90.00%	90.00%	90.00%	90.00%	70 - 95%
	Housing	62.46%	36.35%	72.30%	99.59%	99.67%	99.00%	99.00%	99.00%	99.00%	85 - 100%

[1] Excludes closure assets that have a funded disposition plan.

[2] AUI The index is the ratio of the area of all utilization-Justified space in operating facilities (numerator) to all operational and excess facilities without a disposition baseline and funding (denominator). AUI does not include closure sites. Based o

[3] Federal Real Property Council FY2005 Guidance for Real Property Inventory Reporting May 2005

DOE Goals for Asset Utilization

The FRPC has assigned utilization guidelines for five categories of facilities. The Department has set AUI goals as shown in the table above. These targets were set based on FRPC guidelines and what is estimated to be fully utilized in each of the five categories based on DOE's space utilization experience. The Department is currently meeting established goals in all five categories. However, this is the Department's first report. The Department will use the data validation program discussed under **Action item 3.6 Facilities Data Validation** to analyze and validate reported utilization data. Although DOE currently meets established goals, asset utilization will be monitored annually to ensure the Department stays within our goal, The Department has an extensive Deactivation and Decommissioning (D&D) program which is expected to dispose of over 10 million Square

feet over the next three years which is expected to help maintain and possibly improve our current AUI.

2.1.2 Eliminate Excess and Underutilized Assets – Each year the Department reports to Congress square footage of facilities eliminated by sale, transfer, or demolition. The Department has eliminated over 9 MSF from FY02 to FY05 and has targeted elimination of additional excess as shown in the table below.

DOE Excess Disposition FY 2006 To FY 2008 Summary[1]					
Program	Site	FY 2006	FY 2007	FY 2008	Total
EERE	Golden Colorado	0	0	0	0
EM	Carlsbad WIPP	2,660	0	0	2,660
EM	INL	8,537	99,489	8,946	116,972
EM	SRS	855,601	234,920	256,851	1,347,372
EM	RL	207,678	233,131	239,894	680,703
EM	ETTP	90,009	2,353,685	4,616,706	7,060,400
EM	Fernald	8,713	-	-	8,713
EM	Mound	0	160,268	-	160,268
EM	Oakland ETEC	-	50,544	-	50,544
EM	Carlsbad WIPP	-	-	-	0
EM	Ashtabula	39,950	-	-	39,950
EM	Portsmouth	21,566	35,640	0	57,206
EM	Paducah	12,943	0	0	12,943
EM	Grand Junction	16,904	0	2,700	19,604
EM	Rocky Flats	0	-	-	0
EM	West Valley	-	-	-	0
NE	INL	10,585	1,571	0	12,156
NNSA	LANL	68,087	98,958	51,131	218,176
NNSA	LLNL	55,558	121,526	1,958	179,042
NNSA	NTS	56,224	0	0	56,224
NNSA	PX	0	46,985	966	47,951
NNSA	SNL	12,050	92,865	73,111	178,026
NNSA	SRS	0	10,456	0	10,456
NNSA	Y-12	79,573	119,217	113,228	312,018
SC	Princeton Plasma Physics Laboratory	0	0	2,100	2,100
SC	Brookhaven National Lab	19,452	1,246	0	20,698
SC	Lawrence Berkeley National Laboratory	2,474	5,547	49,379	57,400
SC	Fermi National Accelerator Laboratory	0	790	0	790
SC	Oak Ridge Office	197,009	26,657	48,151	271,817
SC	SLAC	6,008	0	0	6,008
SC	ANL	1,651	0	7,197	8,848
Total		1,773,232	3,693,495	5,472,318	10,939,045

[1]This excess disposition plan is whithin current budget projections.

Summary of Excess Elimination by Program and Site

Attachment 1 provides a list of individual assets by Program and Site that are planned to be disposed of to meet the Department's objectives from FY06 - FY08. This disposition list will provide disposition by asset from FY 06-08 with the following criteria: Planned dispositions > 90K square feet for EM and > 20K square feet for all other programs.

Measure – Reduction of Non – Mission Dependent Assets
Targets have been established for the next three years to continue an aggressive program for disposing of excess property. Excess elimination is a major element of the Programs' TYSPs. The ultimate goal is to move the Department to the point where less than five percent of real property assets are under-utilized or excess.

Reduce Non Mission Dependent Assets[1]							
	Fiscal Year	Candidates For Disposition (GSF)	Candidates As A Percent Of Total Inventory	Actual/Planned Eliminated (GSF)	Cumulative Eliminated (GSF)	S & M Savings/year[2]	Cumulative S & M Savings/Yr[2]
Baseline	FY 02	27,856,715	21.74%	1,366,711	1,366,711	$2,596,751	$2,596,751
	FY 03	26,659,899	20.81%	1,196,816	2,563,527	$2,273,950	$4,870,701
	FY 04	23,876,824	18.64%	2,783,075	5,346,602	$5,287,843	$10,158,544
	FY 05	19,947,767	15.57%	3,929,057	9,275,659	$7,465,208	$17,623,752
Target	FY 06	18,174,535	14.19%	1,773,232	11,048,891	$3,369,141	$20,992,893
	FY 07	14,481,040	11.30%	3,693,495	14,742,386	$7,017,641	$28,010,533
	FY 08	9,008,722	7.03%	5,472,318	20,214,704	$10,397,405	$38,407,938
DOE Goal			5.00%				
[1]2002 Baseline							
[2]Based on 2005 S&M Costs.							

Real property inventory is managed to ensure that inventory which is not fully utilized or excess to identified needs is minimized through either reuse or disposal. The Department employs the following policies to identify, reuse, or dispose of under-utilized real property assets.

- Programs annually identify project/program/mission terminations.
- Programs and Sites identify under-utilized property in TYSP and FIMS.
- Programs include site specific disposal plans in their TYSP.
- The Department screens declared excess real property with other Programs to determine if property is needed.
- The responsible Program plans and programs the elimination of excess real property through reuse, demolition, disposal, transfer, or sale based on reducing risks and minimizing life-cycle costs.
- The Department offsets replacement and new construction square footage with elimination of excess square footage on a one-for-one basis.

Milestones

- **Update Annually** – During first quarter.

Results

- Disposal of excess and under-utilized assets.
- Improvement in AUI.

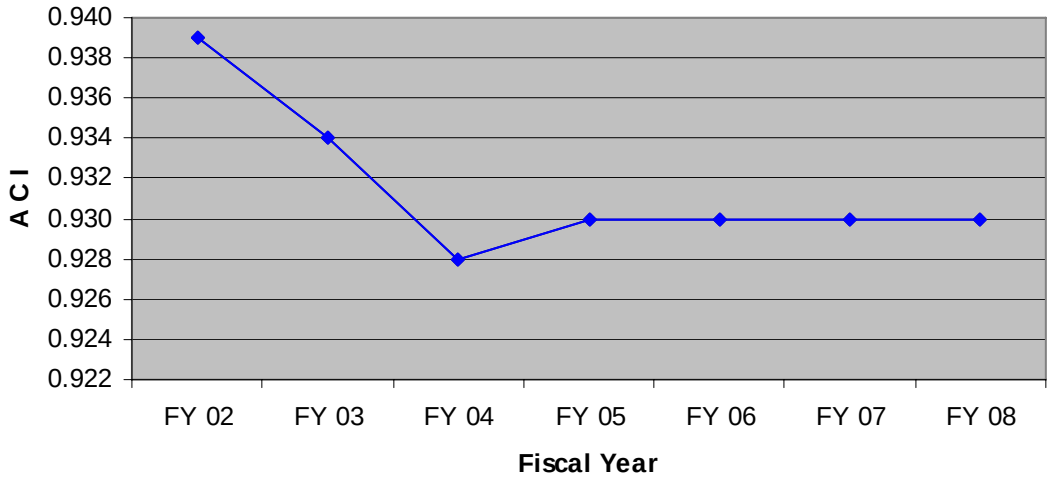
2.2 ***Asset Condition Index***

The Department's real property assets are vital to the accomplishment of its mission. Real property assets are an enabler that cuts across all of DOE's activities. Quality facilities are required to provide a safe workplace that support mission requirements.

The Department will ensure adequate infrastructure funding. There are two components of infrastructure funding: sustainment - to maintain real property inventory from deteriorating and recapitalization - to address deferred maintenance backlog and improve conditions.

- Sustainment consists of maintenance and repair activities necessary to keep the inventory of facilities in good working order. Sustainment includes regularly scheduled maintenance and anticipated major repairs or replacement of components that occur periodically over the expected service life of the facilities. Lack of sufficient levels of sustainment can result in a reduction in service life, increasing deferred maintenance and declining ACI.
- Facilities eventually wear out or become outdated and incapable of supporting mission needs. These facilities will be replaced, recapitalized, or disposed of if excess to needs. Recapitalization extends the service life of facilities or restores lost service life and consists of alterations and betterments needed to keep existing facilities modern and relevant in an environment of changing standards and missions. Recapitalization investments do not sustain facilities and will, therefore, be complemented by an effective sustainment program to protect the facility.
- Increasing sustainment funding and reducing the inventory of operating facilities over the last several years has stopped the decreasing ACI trend, and improved ACI in FY 05. By ensuring adequate sustainment funding is directed toward infrastructure, reducing deferred maintenance through a recapitalization program and improving the quality of facilities data, it is expected that ACI will stabilize and improve over time. See ACI Chart below.

Asset Condition Index (Operating Facilities)



Asset Condition Index Chart

Attachment 2 provides a list of major maintenance, repair, and deferred maintenance reduction projects estimated to cost $5M and over by Program and Site planned to be funded from FY 06 – FY08 to improve the Department's ACI. It is likely that some of

these projects will change based on FY 2008 budget decisions. This attachment will be updated in 4th quarter each year based on revisions to TYSPs and budget decisions.

2.2.1 Improve Asset Condition - The Department has implemented a funding/budgeting strategy to provide a funding profile to improve the Asset Condition Index (ACI) of DOE mission critical facilities from 0.93 to 0.95.

- The Department's goal is to link mission dependency with the asset condition index to ensure those real property assets that are most closely related to mission accomplishment are properly maintained. The Department has set the following goals for ACI as related to mission dependency.
  - Mission critical assets greater than .95
  - Mission dependent but not mission critical greater than .90
  - Not mission dependent greater than .85.

Milestones

- **2Q FY06** – Based on recent FY 2005 FRPP data, prepare a forward-looking facilities backlog reduction model that considers at a minimum; current conditions, anticipated deterioration of assets, demolition, new construction, accelerated deterioration due to maintenance deferral, inflationary pressures and planned funding.
- **4Q FY06** – Use the facility backlog reduction model to evaluate FY08 – FY12 Program budget submissions. Estimate ACI in outyears based on sustainment funding and deferred maintenance reduction program. **See Action item 2.2.1.2 *Utilize a Facilities Recapitalization/Renewal Strategy***.
- **2Q FY07** – Establish ACI targets in conjunction with the Programs.
- **4Q FY07** – Update program specific ACI targets, based on sustainment funding and backlog reduction program.

Results

- Targeted ACI based on Mission Dependency.
- Targets scarce budget dollars on those real property assets that are most critical to mission accomplishment.

Measure - ACI Targets Based on Mission Dependency

DOE Asset Condition Index (ACI) Targets[1]			
Fiscal Year	**Mission Critical**	**Mission Dependent**	**Not Mission Dependent**
FY 05[2]	0.942	0.935	0.861
FY 06	0.943	0.934	0.860
FY 07	0.944	0.933	0.859
FY 08	0.945	0.932	0.858
Target	>0.950	>0.900	>0.850
[1]Excludes EM; [2] Actuals From FIMS			

Benchmarking with NACUBO, the Department has established ACI targets based on mission dependency. For mission critical assets the target is based on NACUBO's recommendation of a .95 ACI for a facility to be in "good" condition. Mission dependent

facilities will be targeted for an ACI of greater than .90 which corresponds to a NACUBO rating of "fair". Note, mission dependent assets will be targeted for an ACI of greater than .85 which corresponds to a NACUBO rating of "poor". Not mission dependent will be essentially funded for environmental, safety and security requirements until they can be disposed of. Using this funding strategy it is believed the Department can improve the condition of those assets most important to mission accomplishment without a budget increase. It is expected these targets can be arrived at by redirecting sustainment funds, disposing of excess assets, consolidating under-utilized facilities and improving the accuracy of the Department's facility data.

2.2.1.1 Budget Adequate Sustainment Funding - The Department will fund sustainment of operating real property assets at the National Research Council recommended level of two to four percent of Replacement Plant Value (RPV). Where a substantial deferred maintenance backlog exists, a recapitalization program will be developed as described in **Action Item 2.2.1.2 Utilize a Facilities Recapitalization/Renewal Strategy.**

- Since FY 2002 the department has increased sustainment funding from 1.34 to 1.90 percent. The near term goal is to increase sustainment to two percent of RPV and avoid deferred maintenance growth. Benchmarking with the National Research Council (NRC) led to adapting their recommendation of two to four percent of RPV. DOE has determined that targeting sustainment funding on mission dependency to ensure scarce sustainment dollars are spent on those assets most important to mission accomplishment will have the least impact on resources. Non-operating facilities will be sustained to ensure compliance with environmental, safety, health, and security standards.
- Since 2002, increased sustainment funding has stabilized deferred maintenance and ACI as shown in the **ACI graph on page 8**.
- Achieving sustainment of two percent of RPV does not necessarily require a budget increase. It is expected that this target can be arrived at by redirecting funds into sustainment, disposing of excess facilities, consolidating under-utilized facilities.
- Asset Condition Targets have been set based on benchmarking with the National Association of College and University Business Officers (NACUBO). NACBO has identified an ACI of .95 as Good, an ACI of .90 as fair, and an ACI below .90 as poor. DOE has established a target of .95 for mission critical assets, .90 for mission dependent assets, and .85 for not mission dependent assets.

Milestones

- **2Q FY06** - Real property requirements and issues incorporated into the Departmental Planning Guidance for FY 2008-2012 budget development. Planning and budget guidance will be developed yearly to ensure Program IFI crosscut budget submissions provide all required information necessary to allow Facility and Infrastructure to analyze the Program's budget submissions to ensure adequate levels of funding have been identified to sustain DOE's real property assets.
- **4Q FY06** – Review and analyze Integrated Facilities and Infrastructure (IFI) crosscut budget against sustainment targets to ensure adequate funding is budgeted to

support the Department's plan to improve overall facility condition. Utilize Facilities Management and Information System (FIMS) data and proposed maintenance funding to determine if maintenance funding as a percent of RPV is between the DOE target of two to four percent. Issue Program Budget Decisions to Programs who have not adequately funded maintenance in their budget submissions to bring funding issues to DOE senior leadership's attention. Review FIMS data with Programs. Ensure RPV and DM data is accurate, up-to-date and reflects current conditions. Utilizing accurate FIMS data is essential to calculate required sustainment funding.

- **2Q FY07** – Establish individual program performance targets for sustainment funding as a percent of RPV in conjunction with **Action item 3.1 Evaluate Sustainment Model for DOE Facilities**.

Results

- Ensures resources are aligned with the Department's real property plan and the plan is aligned with available resources.
- Encourages more consistent and uniform sustainment funding.
  Stabilize the overall condition of the Department's real property portfolio as indicated by ACI.

2.2.1.2 Utilize a Facilities Recapitalization/Renewal Strategy – If a Program's ACI is below the Department's target ACI, the Program will develop a recapitalization strategy to improve the condition of their facilities. This will keep DOE facilities modern and relevant in an environment of changing standards and missions.

- Recapitalization requirements are in addition to sustainment activities (i.e., maintenance and repair) and consist of alterations and betterments to replace or modernize existing facilities.
- Recapitalization activities are traditionally funded by General Plant Projects (GPPs), Institutional General Plant Projects (IGPPs), or line item projects.
- Programs will evaluate the relative importance and contributions of all real property assets to mission accomplishment. A holistic systems approach will be used to identify those facilities and infrastructure assets that directly contribute to the accomplishment of the assigned mission or mitigation of environment, safety, and health issues. Mission critical and mission dependent assets are those that are essential to mission accomplishment and, if not available, would adversely impact the mission. The mission dependency determination will be based upon program assigned mission requirements.
- Develop a recapitalization model to help assess resource requirements to meet the Department's goals for ACI.

Milestones

- **2Q FY06** – Based on FY 2005 FRPP data, prepare a forward-looking facilities backlog reduction model that considers at a minimum; current conditions, anticipated deterioration of assets, demolition, new construction, accelerated deterioration due to maintenance deferral, inflationary pressures and planned funding.

- **4Q FY06** - Use facility backlog reduction model to evaluate FY08 – FY12 Program budget submissions to establish deferred maintenance reduction programs.
- **2Q FY07** – Use backlog reduction models to assist programs in budget preparation. Modify program specific ACI targets, if necessary. Include targets in the FY09 planning and programming budget guidance.
- **3Q FY07** – Assess IFI cross cut budgets against Program targets.

Results

- Provides DOE senior leadership objective visibility of facilities and infrastructure condition targets. ACI will be provided in the quarterly report to the Deputy Secretary of DOE.
- OECM will provide policy guidance and develop metrics to measure progress. Programs will provide Sites specific guidance for targets. Sites are responsible to implement sustainment programs to meet ACI targets for each mission dependency category. Sites provide funding information and metrics to document program compliance.
- Provides leadership information to make informed management decisions.
- Results will be measured by ACI and submitted budgets.
- Establishes expectations and outcomes.
- Alignment of Asset Management Plan, five year budget and Ten Year Site Plans.
- Ensures adequate resources are available to execute the Department's strategic Asset Management Plan.
- Allows tracking of progress towards condition targets.
- Overall improvement of DOE infrastructure due to recapitalization of Departments assets.

2.3 ***Reduce Operating Costs***

2.3.1 Actions To Reduce Operating Costs - Annual operating and maintenance cost as defined by the FRPC consists of recurring maintenance and repair costs, utilities, cleaning and janitorial costs, and roads and grounds maintenance costs. Recurring maintenance and repair cost is reported in the Facilities Information Management System at the constructed asset level for buildings, trailers, and other structures and facilities. Energy consumption data is collected at the site level. Facilities services cost is collected at the site level but is not currently segregated from other operating costs. The Department will report actual costs at the constructed asset level where available and allocate site level costs to the constructed asset level where actual asset-level costs are not available. Collection of this data will enable DOE to look across its portfolio to assess the efficiency and effectiveness of facilities operations and identify opportunities to reduce operating costs.

Energy represents approximately one fourth of the Departments operating costs. Reducing energy costs will have the greatest impact on reducing overall operating costs. Energy consumption represents a significant portion of facilities' operating costs. The Department has established an implementation plan for energy conservation and realization of the goals contained in E.O. 13123, Greening the Government Through

Efficient Energy Management. The Department collects and monitors annual energy usage data on all facilities to track progress against energy reduction goals. The lack of meters for individual buildings imposes a constraint on the level of detail available. Only the high consumption process facilities are separately metered and therefore energy consumption data is collected on a site-wide basis, broken out between process and non-process facilities without a further subdivision by facility type. The Department has exceeded the goal of a 35 percent reduction in building energy consumption per square foot from the 1985 baseline, achieving a 51 percent reduction for FY 2004. The Department established a new annual goal of an additional two percent year-to-year reduction over the FY 2003 baseline starting in FY 2006 as required in the 2005 Energy policy Act. It is expected that maintenance and repair will increase over the next several years as the Department more adequately funds sustainment and begins to tackle the rising deferred maintenance.

Measure – Reduction of Operating Costs

Operating Costs											
	Energy Consumption				Maintenance and Repair ($ M)	Utility ($ M)	Janitorial ($ M)	Pest Control ($ M)	Grounds ($ M)	Snow Removal ($ M)
	Fiscal Year	DOE Energy Consumption KBTU/GSF	% Reduction From 1985 Baseline	Target % Reduction From 2003 Baseline						
Baseline	FY 02	265	-47.5%[1]	-	-	-	-	-	-	-
	FY 03	253[2]	-50.1%[1]	-	-	-	-	-	-	-
	FY 04	250	-50.5%[1]	-	-	-	-	-	-	-
	FY 05	224	-52%[1]	-	885	160	89	1.5	28	2.3
Target	FY 06	-	-	2%[3]	925	160	89	1.5	28	2.3
	FY 07	-	-	4%[3]	960[4]	160	89	1.5	28	2.3
	FY 08	-	-	6%[3]	980[4]	160	89	1.5	28	2.3
[1]Reduction from 1985 baseline (473 KBTU/GSF) - Target 35% reduction by 2010										
[2]New 2003 baseline										
[3]Target percent reduction from 2003 baseline. Based on the 2005 Energy Policy Act and has been coordinated with Energy Efficiency and Renewable Energy (EERE) who these are reasonable targets.										
[4] Based on maintenance funding at two percent of RPV										

In an effort to explore alternatives for measuring the efficiency of operations and maintenance, we will survey DOE Programs and Sites to determine what methods each has in place to measure the efficiency of their facilities operations and maintenance. Where applicable we will adopt these best practices Department-wide to make operations and maintenance more efficient.

Milestones

- **1Q FY07** – Survey DOE Programs and Sites to determine methods employed to measure the efficiency of their facility operations and maintenance. These might include benchmarks as well as metrics to track efficiency.

- **2Q FY07** – Analyze survey to determine if any benchmarks, best practices or metrics could be implemented Department-wide.
- **3Q FY07** – Coordinate with programs to select best practices, benchmarks, and metrics to share DOE-wide.
- **1Q FY08** – Publish findings describing best practices, benchmarks and metrics for implementation as appropriate by programs and sites.

SECTION 3: Other Initiatives to improve Real Property Asset Management

3.1 Evaluate Sustainment Model for DOE Facilities - The adequacy of sustainment funding for DOE facilities is evaluated based on the National Academy of Sciences recommendation and industry standards of two to four percent of replacement plant value (RPV). The Department will benchmark and evaluate the DOD sustainment model for application to DOE facilities to better define DOE requirements. This benchmarking will provide a more robust and accurate sustainment model for DOE facilities than what is currently being used and allow for more precise evaluation of the adequacy of facilities maintenance funding.

Milestones

- **4Q FY05** - Award contract.
- **1Q FY06** - Crosswalk DOD facilities to DOE facilities.
- **3Q FY06** –Analyze results of crosswalk and evaluate applicability.
- **4Q FY06** - Prioritize development of new models.
- **1Q FY07** – Evaluate applicable models against TYSPs and budget.
- **2Q FY07** - Field models to programs.
- **3Q FY07** – Incorporate models in budget process.

Results

- Going from a general two to four percent sustainment model to a tailored sustainment model structured to the DOE portfolio will better align resources to the Department's portfolio.
- Implementation of sustainment model allows benchmarking with DOD, incorporates best practices in DOE's approach to sustainment and this model can be easily structured for use by other federal agencies.

3.2 Update Ten Year Site Plans (TYSP) – The management of real property assets must take a corporate, holistic, and performance-based approach to real property life-cycle asset management that links real property asset planning, programming, budgeting, and evaluation to program mission projections and performance outcomes. Acquisitions, sustainment, recapitalization, and disposal must be balanced to ensure real property assets are available, utilized, and in a suitable condition to accomplish DOE missions. The TYSPs are the foundation for the interrogation of all aspects of real property asset management. TYSPs will be utilized to assess real property assets against delineated program requirements at each site. The plans will identify and prioritize real property asset projects and activities required to meet program mission

requirements. TYSP have been developed for each site which address how the site's real property assets will support the Department's strategic plan, the Secretary's 5-year planning guidance, and appropriate program guidance. It must be a comprehensive site wide plan encompassing the needs of tenant activities. The TYSP must be kept current to reflect current mission requirements and budget realities.

Milestones

- **3Q FY06** - Ten Year Site Plans will be updated to include data reported to the Federal Real Property Profile (FRPP) in Q1 FY2006.
- Site plans will include a prioritized list of real property investments used by program offices to support resource allocation decisions.
- TYSPs will be updated annually during the third quarter of each fiscal year to reflect updated data submitted to the Federal Real Property Profile (FRPP) as well as the results of the latest budget, including the President's budget, current budget as enacted and the prior year budget.
- **Update Annually** – In third quarter in conjunction with budget development to better determine resource allocations.

Results

- Assures integration of current facilities inventory data and strategic mission requirements into the life cycle planning process.
- Allows program budget decisions based on analysis of TYSPs and IFI Crosscut data.
- Increases reliability of facility data through use of data to support management decisions.
- Identifies underutilized and excess property and provides plan for disposal.

3.3 Provide Quarterly Report to Deputy Secretary of Department of Energy-
Provide the Deputy Secretary of the Department of Energy a quarterly summary of real property utilization, condition, and maintenance adequacy, planned versus actual by program. Provide senior leadership current status of real property asset management initiatives. Provides timely feedback on how daily decisions affect infrastructure portfolio. Provide means to hold Programs accountable to achieving assigned targets.

Milestones

- **2Q FY06** – Submit report to Deputy Secretary, DOE.
- **Quarterly Update** – Update real property summary quarterly.

Results

- Provides DOE senior leadership objective visibility of facilities and infrastructure condition, utilization, and maintenance expenditures.
- Provides visibility that resources targeted for real property maintenance are being spent on maintenance.
- Allows tracking of progress towards condition and utilization goals.
- Encourages timely and efficient expenditure of maintenance funds.
- Underscores corporate facilities and infrastructure goals and objectives.

3.4 Normalize Operating Costs Between Sites – Real property operating costs are also linked to DOE's financial management "proud to be" plans for the Presidents Management Agenda (PMA). The Department's goal is to effectively and efficiently manage Sites across the country. Sites have different contractors, maintenance rates, geographic cost factors and site cost factors all affecting operation costs. The Department needs a method to benchmark operating costs between Sites. The concept here is to develop a method to normalize operating costs among Sites to determine the Sites who are performing most efficiently and determine best practices that can be exported to other Sites. In addition this model will improve the real property decision and resource allocation processes to better allocate resources.

Milestones

- **2Q FY05** – Complete pilot site evaluation
- **3Q FY05** – Complete Department-wide questionnaire to gather data.
- **4Q FY05** – Analyze and document the linkages between the contractor's maintenance management system, the contractor's financial management system, and the Department's financial management system and determine how to identify source data for real property operating costs. This process also documents manual processes in the reporting of operating costs so their potential for future automation can be determined. Capture and analyze site burden cost for operating costs at each DOE site. Establish a framework for internal control of annual operating and maintenance cost data. Normalize costs between sites.
- **2Q FY06** – Prepare an operating cost normalization model to facilitate comparisons among DOE sites. This model will allow a comparison of each site's direct and indirect cost burdens.
- **3Q FY06** – Formalize normalization model including establishment of mean, median and standard deviations of elements of hourly maintenance costs. Benchmark labor rates by calculating mean and standard deviation of composite rate and comparing against rate(s) published by Department of Labor.
- **2Q FY07** – Apply maintenance cost normalization to the FY2006 operating cost data. As the data is populated within the model, review, analyze and report results of normalization**.**

Results

- Allows benchmarking of operation costs.

3.5 Enhance Facilities Information Management System (FIMS) - FIMS is the Department's real property asset inventory system and fulfills the requirement in 41 CFR, Chapters 101 and 102, for each Agency to have a real property inventory system. FIMS is a web-based system which contains over 175 data elements on each record. Records include land, buildings, trailers and other structures, and facilities owned or leased by DOE.

In order to better utilize FIMS as a management tool this action enhances the FIMS user interface. This initiative will develop and deploy a fully customizable facilities data

querying and reporting system. The data will be more assessable for headquarters, Program, and Site personnel for analysis to support management decisions.

Milestones

- **Q4 FY 2005** – Develop prototype & proof of concept
- **Q1 FY 2006** – Design and testing
- **Q2 FY 2006** – Migration to production environment (system goes live)
- **Q3 FY 2006** – Querying and analysis capabilities of the Department's Facility Information Management System enhanced through the addition of a web-based front end interface. This will enable managers without detailed FIMS knowledge to construct ad-hoc queries thereby increasing the accessibility and use of real property inventory information.

Results

- Improves management's decision making on real property asset management through the ability to better access facility data.
- Increases visibility of FIMS data to users at all levels
- Allows quicker and more robust querying capability – increased availability of data will allow more comprehensive analysis
- Active utilization of data will lead to improved facilities inventory data.

3.6 Develop Facilities Data Validation Model - Establish a corporate process for validation of real property inventory data to improve data consistency and reliability. FIMS supports DOE's planning and budgeting process, provides accurate facilities data to support budget formulation and execution, provides data used for computation and analysis of DOE's facilities performance measures, Asset Condition Index, Asset Utilization Index, Mission Dependency, and Operating Cost. FIMS data must be maintained as complete and current throughout the life cycle of real property assets, including real property related institutional controls. FIMS data is archived after disposal of real property assets to retain information on disposed assets. To verify accuracy of FIMS data a cooperate data validation model is being developed and implemented to allow both Site/field managers and Headquarters personnel to validate FIMS data and made improvements as necessary to ensure data is accurate.

Milestones

- **1Q FY06** - Draft policy guidelines, identifying resources, roles and responsibilities as well as measures of overall program success.
- **2Q FY06** - Establish a corporate program for validation of real property inventory data.
- **3Q FY06** - Prepare a training class to formally teach the LMI-prepared validation procedure.
- **1Q FY07** – Implement program.
- **4Q FY07** – All sites have performed an internal data validation study.

Results

- Establish a consistent, repeatable, bottoms-up approach to quality assurance of facilities data used in day-to-day decision making.
- Provide more accurate facilities data from which to establish benchmarks and trends thereby improving resource allocation and management decisions.
- Understanding data quality enables better risk analysis of management decisions.
- Identify targeted areas to improve.

Target

- OECM performs quality assurance validations at three sites per year.